Docket No. 8354-U
Georgia Public Service Commission OSS Workshop
Summary of Staff Recommendations
December 23, 1997

BILLING

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
1.	System Capability				
a.	BST has failed to provide systems relating to detailed access usage data for UNEs for billing purposes.	a.	BST will provide access daily usage file (ADUF).	a	December 31, 1997
b.		b.	This is a contractual issue and therefore no proposed solution is offered in the context of this technical workshop.	b.	N/A
C.	BST does not have the capability to record usage data or generate mechanized bills for many network elements. BST is not capable of providing usage sensitive billing for those UNEs that have usage sensitive pricing such as transport, switching, and signaling.	C.	BST shall furnish an accurate paper bill in accordance with interconnection agreements.	C.	February 15, 1998
d.	BST cannot electronically transmit originating and terminating recording information for interstate calls and does not know when it will be able to do so.	d.	BST will provide access daily usage file (ADUF).	đ.	December 31, 1997
E.	BST has failed to provide systems that accurately produce bills for resold services.	e.	Not an issue.	Ċ.	N/A
f.	BST has failed to provide systems for accessing usage data for flat rate calls.	f.	BST will add capability in central offices to capture data for flat rate calls.	f.	December 1998
g.	BST is not providing usage rates for Information Service Provider (e.g. N11) calls even though BST agreed to in middle 1996 and are required to by the AT&T/BST Interconnection Agreement.	g.	CLECs have the ability to negotiate their own contracts with ISPs.	g.	N/A
h.	BST has failed to provide systems for mechanically generated billing statements.	h.	BST shall furnish an accurate paper bill in accordance with interconnection agreements.	h.	February 15, 1998
2.	Billing Accuracies				
	CABs - formatted bills were to be implemented by August 2, 1997. AT&T still has not received accurate CABs bills and remains in testing with BST.		This is a contractual issue and therefore no proposed solution is offered in the context of this technical workshop.	N/A	

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GENERAL

	POTENTIAL ISSUE	PROPOSED SOLUTION	IMPLEMENTATION TIME FRAME
1.	Notice of Changes		
a. b.	Insufficient notice of changes Insufficient documentation of specifications	a and b: BellSouth, AT&T, MCl and Sprint started a series of meetings on December 11, 1997 to develop a Process Document addressing and resolving these "change management" issues. This series of meetings and development of the document are supposed to conclude by January 31, 1998. One additional CLEC will also be notified so that they can have some input. The parties view this as positive, interactive solution.	a and b: January 30, 1998
2. a. b. c.	Proprietary Interface Interim interface. Not compatible with industry standard EDI interfaces. CLECs cannot integrate preordering and ordering at parity with BST. Need for machine-to-machine or Application Programming Interface for preordering.	a thru d: EDI & API will be based on industry standards and therefore can be integrated and available for machine-to-machine use.	a thru d: EDI version 7.0 by March 16, 1998 API by December 31, 1998
a. b. c.	Training Usable specs not made available. Documentation incomplete, has errors. BST personnel lacks adequate training.	 a. Issue addressed in 1a and 1b. b. Issue addressed in 1a and 1b. c. Issue addressed in 1a and 1b. Also, BST to provide feedback on orders submitted for CLEC information in training their own staff. 	a. January 30, 1998 b. January 30, 1998 c. January 30, 1998

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GENERAL

POTENTIAL ISSUE		PROPOSED SOLUTION	IMPLEMENTATION TIME FRAME	
4.	Information			
	Information is not provided to show parity (i.e. CLEC tour of BST facilities).	Not a technical issue to be resolved in this docket.	N/A	

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

Electronic Interfaces for BellS Operational Support Systems	outh's) Docket No)	. 8354-U					
CERTIFICATE OF SERVICE							
I hereby certify that the foregoing Staff Report – Investigation into Development of Electronic Interfaces for BellSouth's Operational Support Systems was filed with the Commission's Executive Secretary and copies were served upon all parties and persons listed below by U.S. first-class mail:							
Stacey Ferris-Smith Assistant Attorney General Department of Law 40 Capitol Square Atlanta, GA 30334	Jim Hurt/Kennard Woods Consumers' Utility Counsel Division Office of Consumer Affairs 2 M.L. King, Jr. Drive Plaza Level – East Atlanta, GA 30334	William R. Atkinson Sprint Communications Co. 3100 Cumberland Circle Atlanta, GA 30339					
Fred McCallum, Jr. BellSouth Telecommunications 125 Perimeter Center West Suite 376 Atlanta, GA 30346	John M. Stuckey, Jr. Webb Stuckey & Lindsey PO Box 79347 Atlanta, GA 30357-7347	Allan C. Hubbard 300 W. Service Road PO Box 10804 Chantilly, VA 20153-0804					
Newton M. Galloway	Charles A. Hudak Gerry Friend & Sanronov	Stephen C. Schwartz					

James D. Comerford Long, Aldridge & Norman 303 Peachtree Street Suite 5300

Zebulon, GA 30295

Atlanta, GA 30308

PO Box 632

In re: Investigation into Development of

Stephen G. Kraskin Thomas J. Moorman Kraskin & Lesse 2120 L Street, NW; Suite 520 Washington, DC 20037

Kenneth P. McNeely AT&T 1200 Peachtree Street, NE Room 4048 Atlanta, GA 30309 Charles A. Hudak Gerry, Friend & Sapronov Three Ravinia Dr., Suite 1450 Atlanta, GA 30346-2131

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Sheryl A. Butler, Ofc. JAG Dept. Army Lit. Ctr.; Suite 713 901 N. Stuart Street Arlington, VA 22203-1837

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Peyton S. Hawes, Jr. 1100 Candler Building 127 Peachtree Street, NE Atlanta, GA 30303-1810

Kent Heyman MGC Communications, Inc. 3165 Palms Centre Drive Las Vegas, NV 89103 Pamela C. Melton LCI International Telecom 8180 Greensboro Drive Suite 800 McLean, VA 22102

James M. Tennant Low Tech Designs, Inc. 1204 Saville Street Georgetown, SC 29440

Steve Brown
Intermedia Comm., Inc.
3625 Queen Palm Drive
Tampa, FL 33619-1309

So certified this 23rd day of December, 1997.

David L. Burgess

Director, Telecommunications

ATTACHMENT 5

FLORIDA PUBLIC SERVICE COMMISSION

In re: Complaint of MCImetro)
Access Transmission Services,) DOCKET NO.
Inc. against BellSouth)
Telecommunications, Inc. for) 980281-TP
Breach of Approved Interconnect)
Agreement)

Deposition of W. N. STACY, taken

by McImetro Access Transmission Services, Inc.,

pursuant to notice and agreement of counsel,

before R. L. Shelnutt, Certified Shorthand

Reporter and Notary Public, at 675 West

Peachtree Street, N.E., Atlanta, Georgia, on

the 22nd day of July, 1998, commencing at

approximately 9:55 a.m.

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A. I did not. This was a -- as I

- 2 characterized it in Tennessee, a prototype, a
- 3 demonstration development, and we asked them to do
- 4 it for a specific class of service and a specific
- 5 order.

10

- O. Do you recall saying in Tennessee that 6 7 you would make the technical description available
- 8 to ALEC within two to three weeks?
- A. Yes.
 - Q. Have you done that?
- 11 A. Yes. That is what this document proposed 12 to do.
- O. Exhibit 23 is the technical 13
- 14 specifications?
- A. It's the technical description. No one
- 16 has asked for any specifications beyond this, to my
- 17 knowledge, so this is what we intended to provide.
- Q. What Albion did --18
- 19 A. Actually, I'm sorry, let me clarify that.
- 20 I said that wrong.
- 21 Some company, and it may have been MCI.
- 22 has asked for the code and I believe that has been
- 23 provided to them already, but that was some point in
- 24 time maybe a month and a half ago and I had
- 25 forgotten about it, but that contact went directly

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- 1 to Albion and they have the release rights to
- 2 release the -- actually the code which is the
- 3 technical specifications if this is not sufficient.
- Q. And you said that this project was
- 5 developed as a demonstration prototype?
- A. Yes.
- Q. This could not be used commercially,
- 8 could it?
- A. This project could not be used
- 10 commercially. The software that was used to develop
- 11 this project could provide the foundation for a
- 12 company developing their own integrated interface,
- 13 but this was not intended to be used as a
- 14 stand-alone interface.
- Q. What would need to be done generally to
- 16 use a software and develop a new commercially viable
- 17 interface?
- A. Let me set some assumptions on that and 18
- 19 then I will proceed from there and I will use MCI's
- 20 assumptions.
- 21 Q. Okay.
- A. MCI has been working for some time to 22
- 23 develop an EDI ordering package with BellSouth, so
- 24 MCI has already made their decisions about what
- 25 databases they're going to keep their ordering

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- 1 information in and how they're going to manage those 2 and how they're going to translate those into an EDI
- 3 order, so that set of data on the MCI side of the
- 4 MCI interface already exists.
- 5 To take advantage of what was displayed
- 6 here, MCI would have to take the coding that Albion
- 7 did which shows them to how to retrieve preordering
- 8 information, write that code -- incorporate that
- 9 code into their own system to retrieve the
- 10 preordering information and to parse the data and
- 11 then to write the code to push that data into their
- 12 own databases, so this would have to be modified to
- 13 work with MCI's databases as it would in any -- I
- 14 mean, that's the case of integration. We can show
- 15 you how to do, it but we can't make the choices on
- 16 your side of the business interface.
- Q. Any estimate as to how long that would 17
- 18 take?
- 19 A. Again, it depends on the number of
- 20 products that MCI is interested in and the coders.
- 21 These folks did it for the first product at a cold
- 22 start in the time shown here, in about three months.
- 23 Obviously, to do the same product the second time
- 24 around would be considerably less than that, but it
- 25 depends on how many products MCI wants to develop

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1 ordering for. It depends on your business plan.

- Q. Would you be able to use this software 2
- 3 with EDI as opposed to PC EDI? I think I know the
- 4 answer to that based on our prior discussions but
- 5 just to be clear.
- A. Yes. What you would not need -- if you
- 7 have already developed EDI, there is half of this
- 8 software that you don't need because half of this
- 9 software actually creates an order. In MCI's case,
- 10 they have already written EDI software to create an
- 11 order and send it, so that is already done, so they
- 12 need the preordering half of this.
- Q. So you wouldn't have an estimate for how 13
- 14 long it would take to develop the software for say
- 15 migration orders as opposed to say new residential 16 orders?
 - A. I'm sorry. We're talking about --
 - Q. Let me start again.

17

18

- 19 I'm talking about just developing the
- 20 same sort of software that Albion did for new
- 21 residential orders. You don't have an estimate for
- 22 how long it would take to do that for, say, migrate 23 as is orders?
 - A. Your word fooled me. We call those
- 24 25 convert as is instead of migrate as is.

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I can give you a rough estimate. For a switch as is order, the only piece of information

3 that's required on the preordering side is a valid

4 address and a valid telephone number which

5 presumably the consumer already has because that's

6 actually the simplest type. That should be

7 literally four or five weeks of development to get

8 that information back if MCI's coders operate at the

9 same efficiency that these folks did because the

10 basic coding to obtain that information out of

11 BellSouth's systems and write it to a database is

12 done, it just has to be modified.

13 Q. One more question about the contacts --

14 A. Yes.

5 Q. -- that the Albion folks used. Were they

16 told who Albion was? What were they told about who

17 Albion was?

18 A. They were told to treat Albion -- they

19 were told that Albion was a developer employed by us

20 and to treat them as they treat a CLEC. They were

21 treated the same as the team that meets with MCI

22 literally on a weekly basis that is doing EDI joint

23 development.

Q. Other than whatever MCI may be doing with

25 CGI and LENS for CSR information, is there any

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1 it is the third of four technical methods of

2 delivering preordering information from an ALEC OSS

3 to a CLEC. It uses the three technologies that are

4 mentioned. It uses electronic data interchange

5 which is used to package up the information and

6 manage the format of the information. It uses the

7 transmission protocol that is called TC PIP and then

8 uses a security protocol called, SSL3, secure socket

9 layers 3.

It has been one of two proposed national

standards for some period of time over a year. It was voted on and approved as a standard I believe

13 last month, but it may have been early this month,

14 I'm not absolutely certain on the date, so it is now

15 one of two national standards in progress for

16 delivering preordering information.

17 Q. Would you agree that MCI has been

18 requesting BellSouth to jointly implement EDITC PIP

19 SSL3 since mid 1997?

A. For some period of time. I'm not

21 familiar with when the original request actually

22 started.

23 Q. Will BellSouth now move forward with the

24 development of this interface?

A. Yes. BellSouth has already committed to

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1 company using CGI LENS to place orders today?

A. To place orders, there are not. There

3 are two companies that we know of that are using it

4 to obtain preordering information.

Q. Is MCI one of those two?

A. Two beyond MCI. I'm sorry. MCI is one

7 that we understand is using it to obtain customer

8 service records. We have another CLEC - did I --

9 yes, I'm trying to remember if we disclosed their

10 name anywhere, OmniPoint, who is also obtaining CSRs

11 and certain preordering information with CGI, and a

12 second one and I do not recall the other one's name.

13 Q. Let's talk for a minute about EDI TCPIP

14 SSL3.

19

15 MR. CARVER: When you get to a stopping

16 place I would like to take a break.

MR. O'ROARK: That's fine with me. This

18 is a good time.

[A short recess was had.]

20 Q. [By Mr. O'Roark] Mr. Stacy, before the

21 break we were just beginning to start to talk about

22 the EDI TC PIP SSL3.

23 A. Yes.

24 Q. Can you explain briefly what that is?

A. It is, as I mentioned earlier in passing,

1 MCI to develop this, as we had earlier, once it was

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2 an approved national standard and, in fact, have

3 begun the development work.

4 Q. How long do you expect that development

5 work to take?

6 A. It is still in scope right now. I do not

7 have a good answer yet. My anticipation is that

8 we'll have something done prior to the end of this

9 year, but part of that is going to depend on

10 cooperation with MCI in joint development which is

11 just now starting, so we're right at the early

12 stages of understanding what the specification

13 actually means.

14 Q. MCI and BellSouth have already had one

15 meeting on implementing the interface?

16 A. I believe one. They may have actually

17 had two, but I'm -- at least one.

18 O. That was my understanding. I wasn't

19 trying to --

20 A. That's correct. I'm not just not sure

21 whether there has been a second one yet or not.

Q. And do you agree that EDI TC PIP SSL3

22 Q. Alki do you agree that Est IC III boss

23 will provide an industry standard for preordering

24 that would be integrable with EDI?

A. Yes, that is its intent and it is now a

ATTACHMENT 6





ECIC Electronic Communications Implementation Committee

November 22, 1996

Re: EB Alternative Task Group Update

The EB Alternative Task Group met in Cincinnati on November 7, 1996 Phil Bennett of Ameritech has provided the following meeting notes. Attachments have been mailed and will be available at the next task group meeting at ECIC #10 in Dallas on Monday, December 2 at 1:00 PM.

Thank you,

Gerry Caprio Administrative Secretary

CONTENTS

Meeting Notes of November 7, 1996

Attachment 1 Attendee List

Attachment 2 Protocol Definition Recommendation

Attachment 3 AT&T EC-Lite

Attachment 4 BellSouth Presentation

Attachment 5 Telesphere Presentation

Attachment 6 NYNEX Presentation

Attachment 7 Southwestern Bell on Cobra

Attachment 8 NYNEX EIF

ECIC Alternatives to CMIP/CMISE Nov. 7, 1996

- Introductions and welcome by Julie and Jerome
- Attendance list circulated (see attachment #1)
- · Review of agenda
 - Review purpose
 - View presentations

AT&T, Ameritech, NYNEX, OCS, BellSouth & OSI

- Open discussion
- · Move towards a proposal for Dec ECIC meeting
- Next steps
- Adjournment
- Meeting Set Up
 - Purpose from last call handed out (see attachment #2)
 - Scope statement has not been provided.
 - Time frame: less than one year, six months to deploy
- Presentations Given
 - AT&T Amitava Hazra (see attachment #3)
 - AT&T and PacBell along with Rochester Telephone have joined to offer an alternative
 - offered as a flexible process to support multiple EC applications
 - allows data to be modeled separately from process
 - Major difference from prior EC/lite proposals is the addition of a second option
 a choice between a graphic string or a sequence of specified elements defined by
 industry agreement (not attributes)

Q&A

- Ed Reduction on attributes could be done by reducing attributes...
 off the shelf tools can do validation why do away with them? Why not pass through
 as a CMIP PDU? Will this work for 'mom & pops'?
- Amitava One size doesn't fit all but, cost is an order of magnitude lower...
- Wei Are there other extensions?
- Amitava If there are multiple destinations (multi-cast) this is a bigger issue than EC/lite...directories, local PICs may be the proper answer but if you are working with CMIP, you must have a manager/agent relationship.
- Sung From business point of view data model can not be removed.
- Amitava OS to OS legacy environment 'bunches' data and data model accomplishes very little.

- BellSouth Wei Liu
 - Three page handout (see attachment #4)
 - Proposed the abstraction of three elements
 - transport
 - interface
 - data model
 - TCP/IP looks like the hands down winner for transport
 - Single interface may be controversial
 - Next step: ECIC model the interface instead of T1M1 to do GDMO

Q&A

- Jerome define web
- Wei/Sung/Ed various tools allow use of web
- OSI Ed Reeder
 - Ed presented overview of what is going on in the Network Management Forum (NMF)
 - Service Management Architecture Requirements Team (SMART)
 - SP to SP TA
 - Performance
 - Order Tracking
 - Customer to SP TA
 - Trouble Ticket business/process/data requirements
 - OO design of process flows
 - TINA C data flows (protocol neutral)
 - SMNP in review
 - CMIP in review
 - DCE in review
 - Lack of ECIC representation is an issue with them

Q &A

- Amitava looks to be in competition with others...best not to compete...do not have the understanding of issues like OBF...AT&T has reduced their representation
- Ed valid concern, lots of European influance but now has a lotof domestic representation...they are addressing other protocols and are willing to cooperate
- Jerome what is the issue?
- Ed this if an FYI, shows what they are doing.
- Jerome Jerry has scheduled call with NMF. Local market entry is major AT&T concern.
- Wei is there deployment of SMART solutions?
- Ed no, it has just started but DCE RPC in trial
- Wei is complexity greater or less?
- Ed they are in some cases more complex because of the European problems but, they are modeling data to pass only what is needed.
- Bob NMF will limit themselves to describing the interface not the implementation (DEC/RPC) they will stay protocol neutral

- OCS Sung Jae Yi
 - Slides available on request
 - Problem statement
 - Business Requirements
 - protect existing investment
 - cost effective
 - rapid implementation
 - minimal infrastructure investment
 - low HR requirements
 - low training
 - low maintenance costs
 - Architectural Requirements
 - Interoperable with current solutions
 - Scalability
 - High level of security
 - Illustration of current solution sets
 - Proposal (Lite)
 - uses light browser interface thru the web (HTTP)
 - sockets into existing CMIP gateway
 - Proposal (Heavy)
 - moves CMIP 'box' to manager site
 - can use dedicated transport facility avoiding the internet
 - Design of Lite (manager)
 - · web server
 - manager functions
 - OSI protocol translation
 - Design of Heavy (manager)
 - Manager adds Web client
 - Agent adds web client
 - Benefits
 - low (or no) initial capital investment
 - minimal overhead
 - quick entry to EB
 - Focus on core business
 - Not tied to technology implementations
 - Flevible
 - no additional cost for new players
 - no additional development effort for new technology

Q&A

- Wei where is the 'back end' capability?
- Sung new players may not have 'back ends' at all.
- Phil lite manages presentation as well?
- Sung yes
- Ed a proxy agent translates between HTML? What is the API for the heavy weight?
- Sung an object of long discussion
- Amitava How to standardize across interface?
- Venkat As a service bureau? Do we define an new MIME type?
- Sung Standard HTTP
- Several How is HTTP standard?
- Ed Are you proposing the standard transport as HTTP/HTML with a deferred data model?

- Sung- Use the same data model but provide the new players with a simple entry point.
- Telesphere Jason Donahue/Jerry Johnson (see attachment #5)
 - worked with Ameritech in this presentation
 - Overview of industry's problem
 - Several needs that may not be solved by single solution
 - Illustrated needs and technologies
 - Segmentation has reduced time to development and lowered cost bar new smaller players
 - Large players still have flow through needs
 - Multiple protocols and mediation will probably emerge in the market
 - Investment in TMN and this must be preserved
 - EDI
 - mature
 - cross industry
 - business standards
 - Possibilities
 - use intranet for low end players
 - TMN for high end players
 - Recommendation leverage cross industry technologies like EDI/CORBA

Q & A

- Phil Did Ameritech unilaterally define these EDI mappings/data elements?
- Jerry Yes.
- Venkat manager/agent may not fit emerging business model
- Bob Can EDI formats can be mapped for GDMO?
- Jerry Yes, EDI provides format that can be used on EC/lite and GDMO can be
 mapped into the EDI record. We should take advantage of the cross industry base of
 business functions defined in EDI.
- Venkat If we go thru a VAN with EDI what kind of turnaround rate is reasonable.
- Jerry It depends. EDI describes structure. The VAN defines performance. Technology can support near real time.
- Ed Are the records ASCII? If so, the delay is in translation?
- Jason The bottleneck is generally the OSS speed.
- Jerry Many are not using VANS. They deploy their own network. TCP/IP and sockets.
- Brian are there standards for real time transmission?
- Jerry No, but there are conventions.
- Amitava What is interactive EDI?
- Jerry Paired transactions over your network. It is implementation dependent.

- Southwestern Bell Brian Bearden
 - Verbal presentation (over the conference bridge) of CORBA
 - Problem Statement
 - OSI HR resources and budget were very hard to find
 - Tools are scarce, too (about three vendors)
 - Tools were complex and didn't have users in mind
 - We may able to 'lead the industry'
 - CORBA can meet all segments' needs
 - History/Scope of CORBA
 - began with OMG in 1979
 - object oriented
 - remote and local objects both treated the same
 - not specific to implementation
 - architecture only
 - inter-vendor protocol
 - Tool sets need not be the same across the interface
 - Runs over any TCP/IP network
 - Many vendors now support CORBA
 - Described a CORBA based gateway
 - support for private line via routers
 - dial in via PPP
 - Nine implementations have been approved
 - Many tools support IIOP GUIs
 - Supports JAVA for thin clients
 - Real and available
 - Sprint's Ntwk Mgr build on it
 - interoperable
 - See http://www.CORBA.NET for test bed/certification

Q & A

- Tom Are CORBA tools less costly?
- Brian We use a 'high end' vendor that is \$500. Server and client runtime versions are \$50 to \$5.
- Amitava Where does TMN stand with T1M1? Are we going to ask them to use CORBA?
- Brian T1M1 is starting to be more accepting.
- Amitava We still need to define data models.
- Brian Yes, all technologies require data modeling.
- Jason T1M1 should be the forum for this discussion.
- Brian ECIC as an implementation forum should recommend.
- Brian DCOM might also be considered.
- Ed XOPEN is working on inter-technology mapping.
- Brian GDMO is complex and these new methods are easier to learn. They are also business neutral. Data structure must be included.
- Ed Based on experience, how long does it take a untrained programmer to use CORBA vs.
 CMIP?
- Brian I'm the only one at my company that understands CMIP...but, CORBA takes three weeks it takes months for CMIP.
- Amitava modeling takes to long
- Brian but, the process of getting agreement on a model to 'get to market' is not the tool issue
- Venkat does CORBA also suffer from small number of vendors and tools?

- Brian it is much more mature. The market is much wider. There are some 50+ vendors and the tools are getting better and cheaper.
- Venkat the number of real applications are very few.
- Brian OMG has eight mission critical projects listed on their home page Southwest has two,
 Motorola put Iridium on it....
- Jerry How far has CORBA gone outside of your company?
- Brian We are using CMIP with MCI, AT&T, & Sprint. We use Java with smaller firms.
- NYNEX Jerry Stroud
 - Handouts (see attachment # 8)
 - History of their experience
 - NY PUC specified EB
 - CLEC/Reseller information requirements defined
 - Electronic Interface Format (EIF)
 - Began as proprietary contract for internal OS communications
 - tag value based
 - elements defined by model
 - template driven
 - ASCII
 - A reseller took specification and coded application in a few months
 - NYNEX also supports a web browser

Q & A

- Ed what did you do about security?
- Jerry we addressed it with commercially available encryption tools.

Open Discussion

- Alternatives reviewed
 - EC/LITE
 - EIF
 - EDI
 - CORBA/IIOP
- Transport TCP/IP seems to be the dominate transport solution.
- EC/Lite
 - Cost Factors
 - expensive tools sets
 - reusable for those that have already implemented
 - not acceptable to smaller customers
 - high HR costs
 - long learning curve for development
 - high mtce
 - CMIP testing is less
 - · Supports multiple applications
 - Stack generally limited to UNIX only
 - No data model yet approved but this a problem common to all proposals
 - Faster to market than fully modeled GDMO process
 - It is unclear that what is left out would substantially speed time to market
 - Conformance testing may be faster
 - Implementation of business related issues may not be faster to market
 - easily extendible

- Secure as existing CMIP processes
- Scalable as existing CMIP processes (more up for large customers than down for small ones)
- Reliable as existing CMIP processes
- EIF (tag values)
 - Currently proprietary
 - Cost factors
 - Requires development of parsing routines
 - Low development time
 - Generally one time build
 - Changes are in template
 - Transport independent file transfer (could be done via message orientation)
 - Simple and fast to market
 - Can be built to meet business requirements
 - Are there limits to data complexity?
 - Supports groups/bundles
 - Supports instances
 - Secured from external applications
 - Scalability: performance is linear
 - Reliability
 - Conformance/interoperable testing between three parties
 - NYNEX is developing testing suite
 - Library for acknowledgment/response must be developed (NYNEX isn't offering this)

EDI

- Cost factors
 - EDI spec \$600
 - TCP/IP tools
 - Software tools are available on several platforms PC thru UNIX
 - Transaction set tools are available
 - Development costs can leverage experience within organization
- TCIF has worked out mapping for resale
- Mature widely available from several vendors
- Widely in development for resale efforts
- Meets business requirements(or can be made to)
- Supports loops (reoccurring instances)
- A transaction set becomes the complex object...
- Security has been defined for use of tools like DES
- Scalable across platform and market segments
- May have scale problems for high transaction volumes
- Interoperability between vendors is high
- Data mapping/business rules are key to interoperability
- Mapping of data elements to the transaction set should be done by standards body

CORBA

- Cost effective (tools are inexpensive)
- Time to market is quick
- Data model mapping tools available
 - · easier to do from 'scratch'
 - OMG has set up modeling groups but not approved models are presently defined (in process)
 - took four hours to translate 227 to CORBA

- Conformance testing is certifying by OMG
- Vendor supported but not yet mature
- Security is in the works but for now would have to be external
- Cross industry
- CORBA is scalable from thin client to larger UNIX platforms
- Phil brought in some recent articles on CORBA (see attachments)

Next Steps

- Written scope/mission statement
- Members should talk to customers
- Summary for Steering Committee
 - pros/cons
 - judgment criteria
- Recommend ECIC define simple data syntax from business
- Process and Data models from other bodies i.e. OBF, NMF, or NOF...
- Have Network Management Forum presentation at December ECIC

(513) 629-6587

Attendance List Nov. 7th Meeting

<u>Name</u>	Company	Telephone
Julie Maier	Cincinnati Bell	(513) 397-7227
Monica Lathrop	Cincinnati Bell	(513) 397-5855
Alba Johnson	Bell Atlantic	(301) 236-2155
Alan Stone	Cincinnati Bell	(513) 397-6661
Tom Kelley	Cincinnati Bell	(513) 397-6679
Bob Hunaemer	Bell Atlantic	(301) 595-1609
Venkat Rao	GTE	(813) 979-5343
Ed Reeder	Open Systems Integrators	(916) 353-2501
Robert A. MacDonald	Sprint	(913) 534-5189
Jason Donahue	Telesphere Solutions, Inc	(415) 845-2661
Jerry Johnson	Telesphere Solutions, Inc	(415) 845-2662
Philip Bennett	Ameritech	(847) 248-4158
Wei Liu	BellSouth	(770) 209-8062
Sung Jae Yi	ocs	(908) 463-3131
Jerry Stroud	NYNEX	(212) 395-8618
	By Conference Bridge	
Tom Barrett	PacTel	(510) 823-1941
Brian Bearden	SBC	(314) 235-7345
Darla Miller	Titan	(813) 979-2412
Greg Novakovich	Sprint	(816) 854-8039
T		(220) (00 (500

AT&T

Jerome Melson

Recommend/Define protocol for alternative solution for local EB.

- 1) Transport
- 2) API

That is:

- Cost effective
- Fast to Market (less than six months to implement)
- Meet business requirements (not limited to one business function)
- Flexible (to keep up with OBF modifications)
- Secure
- Scaleable
- Reliable

That provides a single solution for:

- Pre-sale/Post sale
- Ordering
- Trouble Administration

ATTACHMENT 7

MCI Tolocommunications Corporation



780 Johnson Ferry Road Asianta, GA 30342 404 267 5500

August 18, 1997

Ms. Hene Bernett Sales Director BeltSouth Interconnection Services 1980 West Exchange Place Tucker, GA 30084

Dear Ms. Barnett:

This letter is in response to Cathy Forbes' June 26 letter, which replied to Helen Arthur's June 16, 1997 inquiry in reference to the following section in the MCImetro-BettSouth Interconnection Agreement:

Attachment VIII

2.1.3 Street Address Guide (SAG)

2.1.3.1 Within thirty (30) days after the Effective Date of this Agreement, BellSouth shall provide to MCIm the SAG data, or its equivalent, in electronic form. All changes to the SAG shall be made available to MCIm on the same day as the change to the data is made.

This section clearly requires BellSouth to provide to MClm in electronic form either the SAG data or its equivalent. As it is more than thirty (30) days since the interconnection agreements became effective in Georgia, Florida, Tennessee, and North Carolina, BellSouth is overdue in providing to MClm in electronic form the SAG data.

Ms. Forbes letter states, and I quote, "Since, BellSouth is unable to provide the initial SAG data and daily updates in batch form the only available equivalent would be using online access". MCIm is capable of accepting an electronic download of this data via NDM until a regular mechanized daily batch process can be implemented to accommodate daily updates.

MCIm insists that BellSouth comply with the terms of its interconnection agreements with MCIm and provide MCIm in electronic form with the SAG data no later than August 29, 1997. Failure to do so will significantly hamper MCIm's entry into the local market by forcing MCIm to continue to contend with manual intervention in the pre-ordering/ordering process to verify customer street address information, and, will demonstrate BellSouth's continued lack of compliance with the contracts.

D13

Please reply to this letter no later than August 22, 1997.

cc: Marcel Henry - MCI Charlene Keys - MCI Bryan Green - MCI Jaramy Marcus - MCI Joe Baker - BellSouth Pam Lee - BellSouth